

# THE LAND-GRANT VISION: COLLEGE OF AGRICULTURE STRATEGIC PLAN 2007-2012\*

Submitted March 25, 2007

\*This Strategic Plan is submitted provisionally while the College self-study, review and planning cycle is in progress. In the fall of 2007, upon completion of the College review, this plan will be revised and finalized. Several of the sections of this Strategic Plan are shared with the 2007 Self-Study; others are conserved from the 2003 Strategic Plan.

Further information on the Self-Study and College Review can be found at:

http://www.ca.uky.edu/administration/selfstudy.php This site also provides access to several documents cited in this Strategic Plan and to the complete "Action Plans" submitted by academic departments. The latter were used extensively in preparation of this review, as well as the Self-Study documents.

#### Who We Are

The College of Agriculture was founded as, and remains a land-grant institution, offering access to knowledge and learning to enhance the lives of Kentuckians. The College is fundamentally interdisciplinary; we apply the biological, physical, and social sciences to challenges in agricultural, food, and environmental systems. Our work encompasses farms and forests, food and fiber, families and communities.

The College holds a unique position as the home of the Kentucky Agricultural Experiment Station and the Kentucky Cooperative Extension Service. Our teaching, research, and extension programs are part of a national system that maintains a statewide presence and links local, state, and global issues.

#### **Our Vision**

The College will be recognized for excellence in fostering:

- learning that changes lives,
- discoveries that change the world, and
- opportunities that shape the future.

#### **Land-Grant Values**

The College affirms the University of Kentucky's values. As a College, we are guided by the values underlying the land-grant philosophy:

- <u>learning</u> enhancing access to educational opportunities for all;
- <u>discovery</u> expanding knowledge through research; and
- <u>engagement</u> collaborating with diverse institutions, communities and people to improve lives. The hallmark of our work is the integration of these three values – learning, discovery, and engagement – into programs that make a difference.

#### **Our Mission**

The mission of our College is:

- to promote sustainable farming and food systems, from production through consumption;
- to enhance the health and well-being of people and the environment in which they live; and
- to expand economic opportunity by sharing the knowledge and tools for wise, innovative uses of natural resources and development of human potential.

As full partners in the University of Kentucky and in every Kentucky county we:

- facilitate lifelong learning, informed by scholarship and research,
- expand knowledge through creative research and discovery, and
- serve Kentuckians by sharing and applying knowledge.

The College shall sustain the land-grant heritage of achievement in this challenging new century.

#### Goal I: Enhance the University's Stature Among its Peers

As a land-grant institution, the College of Agriculture offers access to knowledge and learning for citizens and students throughout the Commonwealth. Agriculture, food, and environmental systems are key components of Kentucky's economic future, and the UK College of Agriculture is playing a prominent role in those areas with its research, teaching, and outreach programs. The UK College of Agriculture seeks to be recognized as one of the top colleges of its kind in the nation.

# **Most significant concerns**

- Infrastructure and capacity appears likely to constrain further growth and advancement in all mission areas, and across most units in the College. Limits have been reached in:
  - quantity and quality of lab space
  - ability to sustain Top 20 caliber farm and forest research capacity
  - office, meeting and teaching space
  - IT and communications support and hardware
  - grants, accounts, business management for rapidly growing operations.
- Many national metrics are size-dependent (for example, the pending NRC evaluations of doctoral programs). The UK College of Agriculture is a mid-size institution.
- We have made limited progress on strategic indicators calling for development of metrics relevant to the national standing of Extension and other land grant programs.
- National rankings in most agricultural disciplines continue to be unavailable or of limited validity.
- The University plan projects limited growth in faculty numbers. Many departments report that further growth in either enrollment or grant funding is unlikely without addition of faculty.
- Many departments report limited office space for faculty and staff.
- Retention and compensation of highly skilled staff remains a challenge.
- Recruitment or development of faculty at the most distinguished level (e.g., Academy-level) remains a deficiency.

#### **Objectives and Strategies**

- 1. The College will strive to recruit, develop and retain exceptional nationally distinguished faculty.
  - The College will selectively and opportunistically reallocate resources to identify, recruit and support exceptional mid-career faculty who bring elevated recognition and leadership to targeted programs.
  - More aggressive retention strategies will be employed for high performing faculty.
  - We will develop and improve strategies for professional development and mentoring of new faculty.
- 2. The College will further develop plans for expanding and enhancing the physical infrastructure needed to sustain the growth and advancement of the last decade.
  - The 2007 College Review will be conducted as a "focused" review emphasizing

- infrastructure and capacity for growth.
- We must pursue increased resources and funding for high-quality lab, teaching and field facilities.
- 3. To enhance the quality of support for all programs, the College will improve recruitment, retention and remuneration of technical, clerical and professional staff.
  - We will assume a more flexible strategy with regard to reclassification of staff positions.
  - We will complete the County Enhancement Initiative and fully implement the agent career ladder and professional development program.
- 4. The College will continue to improve access to resources and infrastructure through enhanced facilities, business management and information technology.
  - We will seek to strengthen the link between funding decisions, plans, and results.
  - We will continue to modernize management, information technology, and business operations for more effective support of College programs.

# **Key Indicators**

- 1. Three programs ranked in the top 10 or the top quartile of public research universities according to the Faculty Productivity Index.
- 2. Increased its total endowment to \$120M.
- 3. Developed widely accepted metrics to document that the Kentucky Cooperative Extension Service ranks among the top 10 in the nation.
- 4. Documented that the Kentucky Agricultural Experiment Station ranks among the top 20 nationally as indicated by NSF-reported research expenditures.
- 6. Increased the number of faculty receiving national awards and honors to 4 per year.
- 7. Increased the number of active or emeritus faculty with membership in the National Academy of Engineering or National Academy of Sciences to 2.

# Goal II: Prepare Students for Leadership in the Knowledge Economy and Global Society

Educating students was the earliest mission of the College and remains the most important way that we enhance the future of the Commonwealth. Instruction is fully integrated with our other missions – research and extension. The College expects its graduates to become leaders in their professions and their communities. To this end, the College must attract and graduate outstanding students with diverse backgrounds and the skills to meet the challenges of the future.

# **Most significant concerns**

- In several programs that have experienced significant enrollment growth during the last several years, additional undergraduate enrollment will not be possible without additional faculty instructional DOE.
- Quality and quantity of classroom space on south campus has become limiting.
- Some classrooms and teaching labs are inadequately equipped.
- University-wide, and in the College of Agriculture, freshman retention and sixyear graduation rates are not up to the standards of Top 20 benchmarks.
- Advising and teaching quality is inconsistent in some programs.
- Graduate enrollment could be increased in most College programs. However, assistantship support is increasingly expensive and may become an unattractive option for many faculty research programs.
- Continuing tuition inflation substantially increases the cost of funding Graduate Research Assistants.

# **Objectives**

- 1. The College will recruit and retain students with the highest academic and professional potential.
- 2. The College will provide a rigorous learning environment that is conducive to success and prepares graduates to deal with global issues.
- 3. The College will seek to offer the full scope of learning opportunities for all of its fields of study with access to advanced degrees, distance learning and continuing education.
- 4. The College will continue to integrate the students and faculty from the former College of Human Environmental Sciences, which has been merged with the College as a new School.

# **Strategies**

- Provide the best possible curriculum opportunities supported by a faculty of dedicated and skilled instructors and advisors.
- Review College-wide advising practices, particularly at the freshman level.
- Foster student participation in personal and professional development opportunities beyond the classroom, including student research, student and professional organization membership, international travel experience, and internships.
- Monitor the success of graduates and use those findings as a part of the process driving curriculum changes.
- Monitor curriculum offerings for contemporary relevance, ensuring that students are both fully engaged and performing at levels equal or superior to students in national and international peer institutions.

- Increase opportunities for graduate studies, distance learning and continuing education.
- Reevaluate college-wide requirements and academic offerings to reflect the inclusion of students from the School of Human Environmental Sciences.
- Secure additional support for college-based scholarship and recruiting programs.
- Increase faculty recognition for academic and extracurricular advising.

# **Key Indicators**

- 1. Increased the first-to-second year retention rate of first-time, full-time, degree-seeking students by 1 percent per year.
- 2. Demonstrated improvement on indicators of quality undergraduate education, as reported by seniors on the National Survey of Student Engagement (NSSE).
- 3. Increased scholarship funding awarded by the College to \$750,000 per year.

# Goal III: Enhance the Intellectual and Economic Capital of Kentucky through Growth in Research

The College's land-grant mission encourages truly creative research endeavors that result in the discovery of new knowledge. Further, we aspire to capitalize on the individual and collective achievement of our faculty by applying discoveries to the improvement of agriculture, industry, families, communities, and the natural environment. These pursuits will establish the College as a premier institution providing knowledge-based solutions.

# **Most significant concerns**

- Infrastructure and facilities limit the potential for continued growth of research. Including:
  - Grants management, accounting and reporting capacity is stretched to the limit of current staff.
  - Our most distinguished and successful research programs have insufficient laboratory space for further expansion.
  - Plans must be made to deal with increasing operating budget deficits and substantial deferred maintenance needs at off-campus research facilities.
  - On-campus facilities for the environmental sciences and for HES are inadequate and will not support Top 20 caliber programs.
- The research capacity and attainment of some elements in the School of Human Environmental Sciences remains below expectations.
- Funding of doctoral Graduate Research Assistants on extramural funds should increase.
- Despite substantial recent progress, some key administrative or leadership positions remain unsettled and some critical faculty positions remain vacant.

#### **Objectives**

- 1. The College will aggressively pursue targeted strategies to increase extramural research funding from all sources, with particular emphasis on federal competitive funding.
- 2. The College will develop state-of-the-art facilities and equipment to increase our capacity for cutting-edge science.
- 3. The College will integrate discovery science and applied research and technology in teaching, technology transfer and outreach activities to solve problems and generate economic, societal, and environmental benefits at the state and national levels.
- 4. The College will attract highly qualified doctoral students and postdoctoral scholars.

# **Strategies**

- Review and update the College's "Targets of Opportunity" to identify research
  opportunities areas where cutting-edge science and critical mass exist to achieve
  national and international prominence.
- Develop inter- and multi-disciplinary research teams, facilities and resources within the College, across the University and with other universities (including Kentucky State and other state universities).
- Develop a process for compiling and reporting impacts of research.
- Secure resources to enlist young scientists' contributions to the research program at the undergraduate and graduate levels.

• Advocate resource and facility needs to a wide audience.

# **Key Indicators**

- 1. Increased federal competitive grant awards from 33 to 40 percent of the College's extramural funding portfolio.
- 2. Secured authorization to renovate research and service facilities or to construct a new building for research activity.
- 3. Increased the number of postdoctoral scholars to 100.
- 4. Increased the dollar value of external awards to \$40M.
- 5. Increased the number of doctoral students by 10 percent.

#### **Goal IV: Embrace and Nurture Diversity**

The College is committed to creating an environment where diversity is valued and all individuals can fulfill their highest potential. Respect for diversity of thought, culture and all human differences is the cornerstone of all our actions. To implement its mission, the College must model the ways in which diversity, fairness and equity in policies and practices are essential to learning, discovery and engagement.

# Most significant problems

- The College has yet to achieve targets in most areas. Diversity remains unacceptably low in many departments and program areas.
- At the faculty level, both gender and racial diversity are inadequate. Only four African-American faculty have been hired in five years.
- While substantial efforts are being made to hire and retain minority county agents, progress remains slow.

# **Objectives**

The College will establish structures, implement processes, and focus its resources to:

- 1. sustain an institutional climate wherein differences are valued,
- 2. create work and learning environments wherein every person has opportunities to achieve their highest potential, and
- 3. support an inclusive institution responsive to the needs of all students, staff, faculty and citizens.

# **Strategies**

- Develop a plan for implementing recommendations of the College of Agriculture Diversity Review and Planning Task Force (April 2003: "Diversity Issues in the College of Agriculture": www.ca.uky.edu).
- Review and report annually on the progress towards addressing recommendations of the College of Agriculture Diversity Review and Planning Task Force.
- Establish a network of partners with 1890 land-grant universities for recruitment of students, faculty and staff.
- Review, evaluate and optimize resources and operations of the Office of Diversity, in support of recruitment and retention.
- Continue and expand the extension internship program.
- Conduct a baseline climate survey at the College level.
- Consider expansion of summer programs targeted for potential undergraduate minorities.

#### **Kev Indicators**

- 1. Completed favorable USDA-CSREES civil rights reviews as appropriately scheduled.
- 2. Increased the percentage of minority undergraduate students from approximately 7.9% in 2006 to 8.9% in 2012.
- 3. Increase the 2006 percentages of graduate students, professional staff and faculty who are minorities by 10 percent each by 2012.
- 4. Increase the percentage of female faculty to 30% by 2012.

# Goal V: Engage Kentuckians through Partnerships to Elevate Quality of Life

Agricultural, environmental, economic, and societal issues create an unprecedented demand for knowledge and research-based educational programs applicable to the needs of all Kentuckians. Economic development, leadership development, family, nutrition and health issues, opportunities for youth, and a rapidly changing agricultural landscape in Kentucky require a vital, progressive and responsive College of Agriculture and Cooperative Extension system.

# **Most significant problems**

- Confirmed funding for Phase II of LDDC is our highest state priority, but has yet to be approved.
- Administrative changes in Regulatory Services are incomplete.
- Several, but not all, Extension partnership initiatives have been successful and sustainable.
- Extension's role in health programs should be carefully reviewed and planned.
- It is critical that we complete implementation of the County Enhancement Initiative and successfully conclude the national search for a new Associate Dean for Extension.
- Statewide communications systems are improving but not complete.
- The expectation for graduate education for agents has been established. Now more accessible and appropriate graduate degree options must be developed.
- Current budget models provide for salary increases but not operating expense inflation. Operating support for extension, teaching and some applied research areas becomes increasingly short. Reliance on extramural sources necessarily increases.
- The role of the Kentucky Tobacco Research and Development Center, as plant biotechnology commercialization moves beyond plant manufactured pharmaceuticals, should be reviewed and strategically targeted.

# **Objectives**

- 1. The College will advance sustainable agricultural, food and natural resource systems.
- 2. The College will improve the economic, social, and physical well-being of individuals and families through lifelong educational programming.
- 3. The College will improve the capacity of communities to address critical issues through programs in leadership development, civic engagement, and economic development.
- 4. The College will help Kentucky's youth develop the character traits to be successful citizens.

# **Strategies**

- Sustain traditional Extension strengths while offering innovative new programs in health and wellness, business, engineering, and humanities to serve increasingly diverse stakeholders.
- Promote enhanced linkages between Cooperative Extension and new partners within and outside the University.
- Link all Kentucky communities and the University through Cooperative Extension offices and agents in every county, applying leadership to address societal issues.
- Establish baseline measures to assess and communicate the impact of Extension

- programs.
- Enhance recruiting, retention, training, and support for outreach personnel statewide.
- Develop meaningful metrics and indicators of the stature of Cooperative Extension and the Agricultural Experiment Station on a national level.
- Enhance the infrastructure and service capacity of the Livestock Disease Diagnostic Center and Regulatory Services.
- Promote development and commercialization of intellectual property by College faculty.
- Engage key constituencies particularly alumni to help the College achieve its objectives.

# **Key Indicators**

- 1. Developed or expanded at least three major outreach partnerships as indicated by formal agreements and/or new or enhanced outcome measures related to joint programming.
- 2. Increased annual Extension or outreach related grant support by 30 percent.
- 3. Enhanced and refined an accessible, easily understood database of Extension outcomes, with baseline data reported for each program area of Cooperative Extension, including such measures as: the adoption of new practices by producers; the acquisition of life skills through 4-H Youth Development programs; the adoption of recommended health, nutrition, or safety practices by individuals or families; and the acquisition of new or improved skills in communication, problem-solving, or group processes by individuals or families.
- 4. Increased knowledge of Extension programs, as indicated by a 5 percent increase in familiarity measures in statewide surveys.
- 5. Increased by 10 percent the number of patents filed by faculty, and established three new start-up companies based on College research.